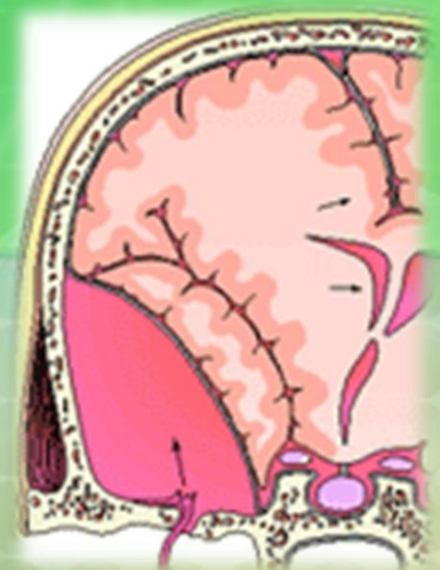


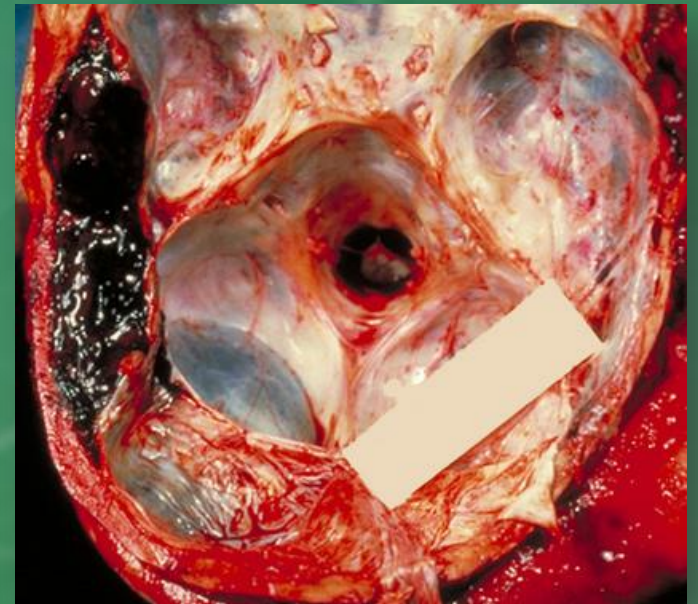
# HEMATOAMELE EXTRADURALE

Curs rezidenti  
Prof. Dr. Gorgan Radu Mircea  
Februarie 2009



# INCIDENTA

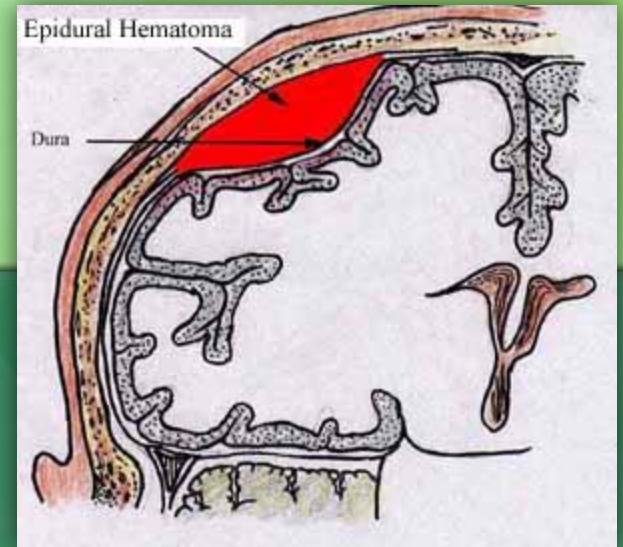
- 1% DIN TOTALUL PACIENTILOR INTERNATI PENTRU TRAUMATISM CRANIAN
- RAPORTUL BARBATI-FEMEII= 4:1
- FRECVENTA MAXIMA LA TINERI
- RAR INAINTE DE 2 ANI SI DUPA 60 DE ANI



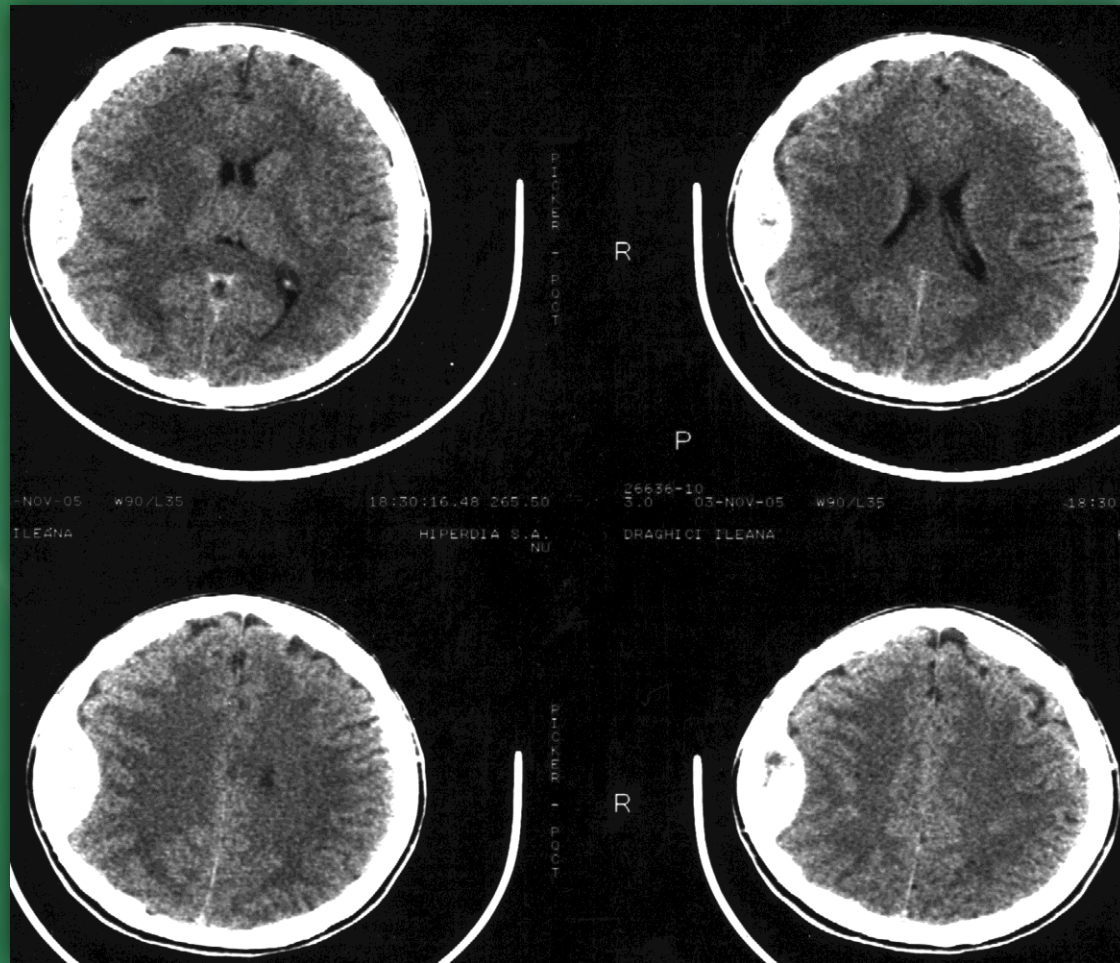


# MECANISM

- DE REGULA EXISTA O **FRACTURA TEMPORO-PARIETALA** CARE RUPE **ART. MENINGEE MEDIE** IN SANTUL SAU DE PE FATA INTERNA A CRANIULUI, LA NIVELUL PTERIONULUI, CAUZAND O SANGERARE ARTERIALA CARE DISECA DURA DE PE TABLIA INTERNA
- SAU: **DISECARE TRAUMATICA A DUREI SI SANGERARE SECUNDARA ARTERIALA** IN SPATIUL CREAT



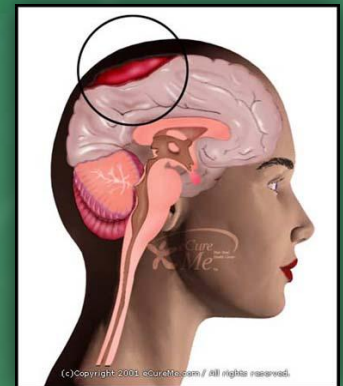
# HEMATOM EXTRADURAL TP DREPT



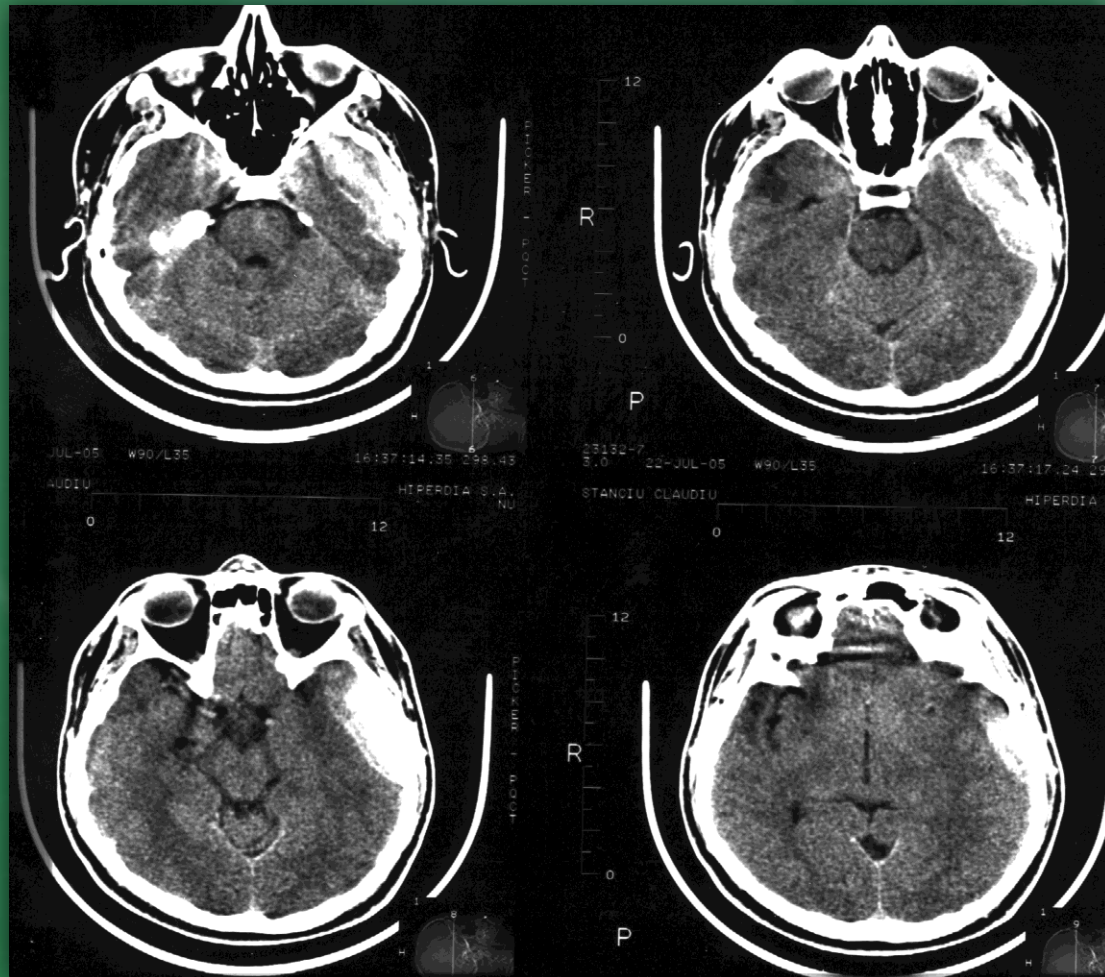


# SURSA SANGERARII

- 85% **ART. MENINGEE MEDIE**
- RESTUL CAZURILOR SE DATOREAZA SANGERARILOR DIN **VENA MENINGEE MEDIE SAU DIN SINUSURILE VENOASE DURALE**
- **LOCALIZAREA** CEA MAI FRECVENTA ESTE LATERALA EMISFERICA (**TEMPORALA, PARIETALA**)
- 5-10% DIN HEMATOAME APAR **FRONTAL, OCCIPITAL SAU IN FOSA POSTERIOARA**

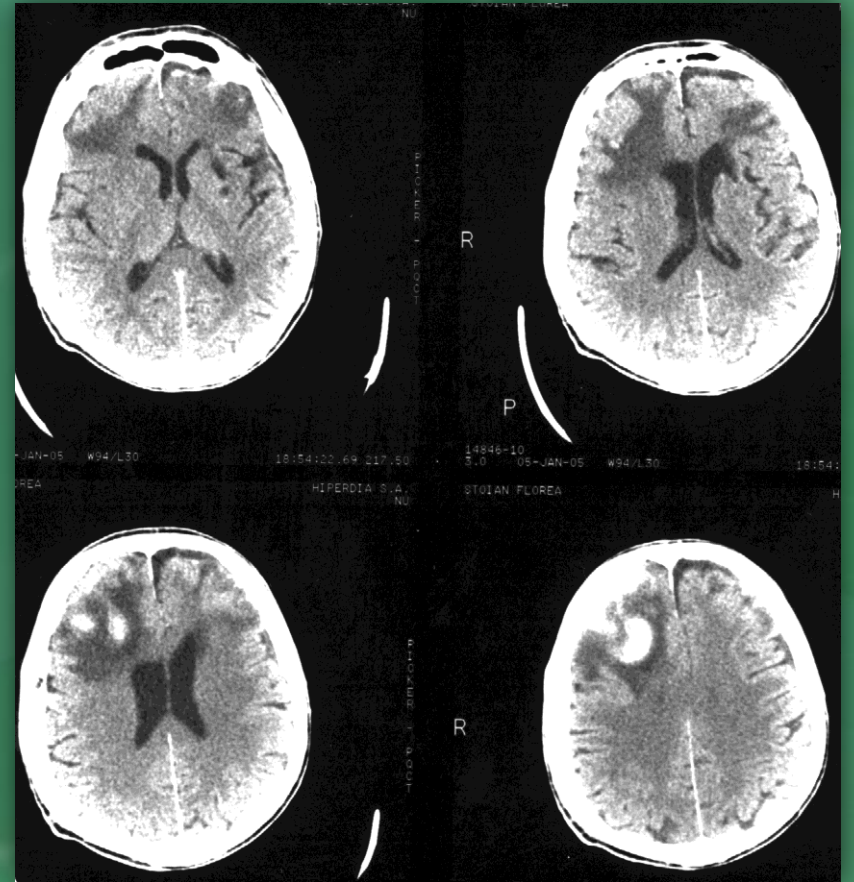
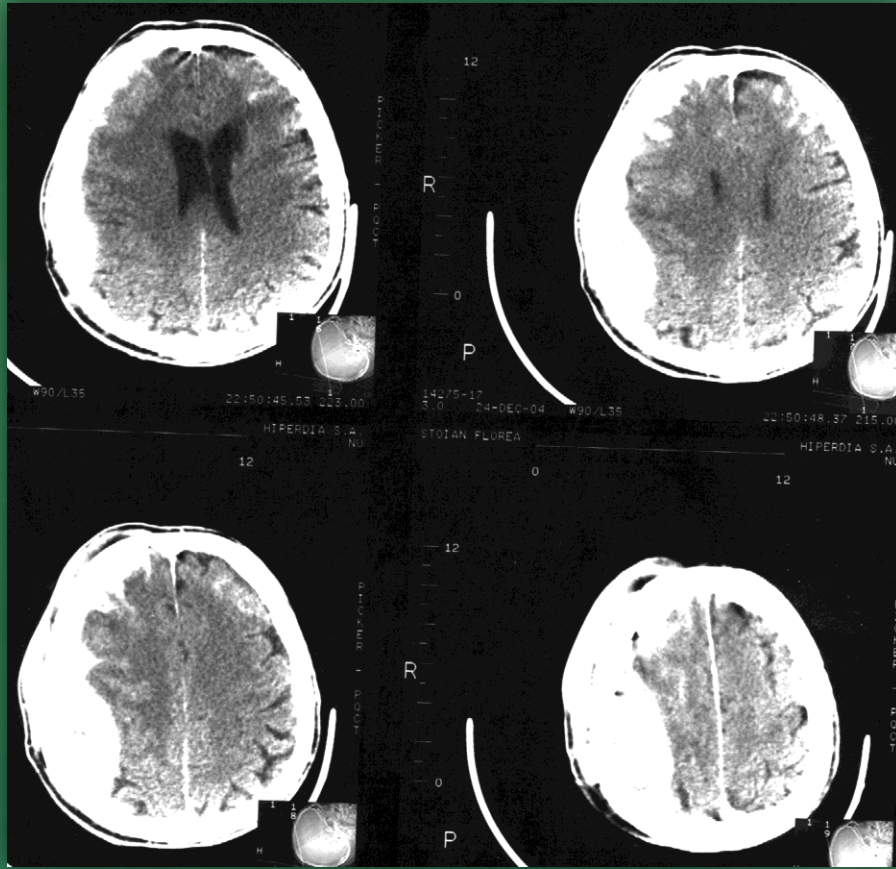


# HEMATOM EXTRADURAL TEMPORO-BAZAL STANG

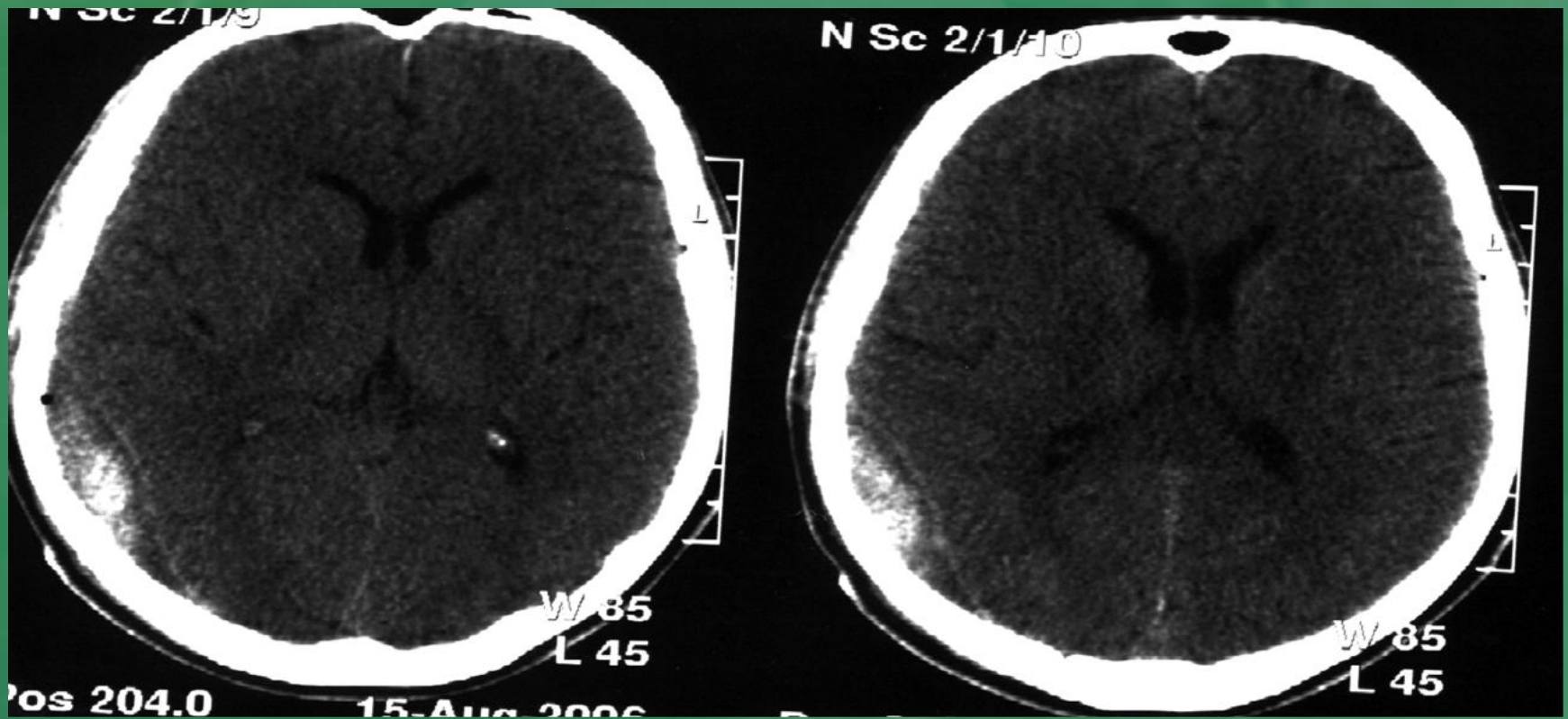




# HED + CONTUZIE HEMORAGICA

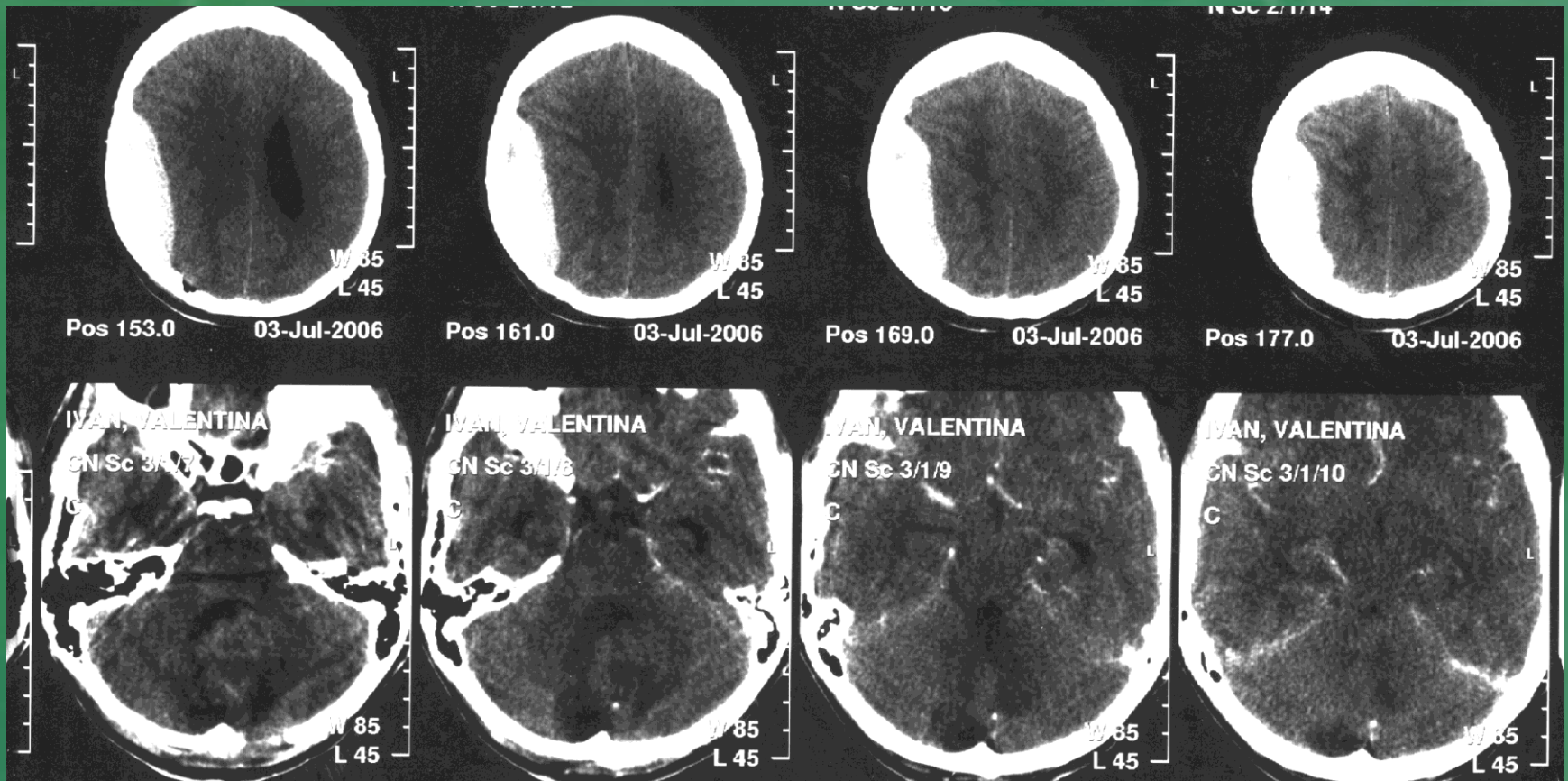


# HED SUBACUT

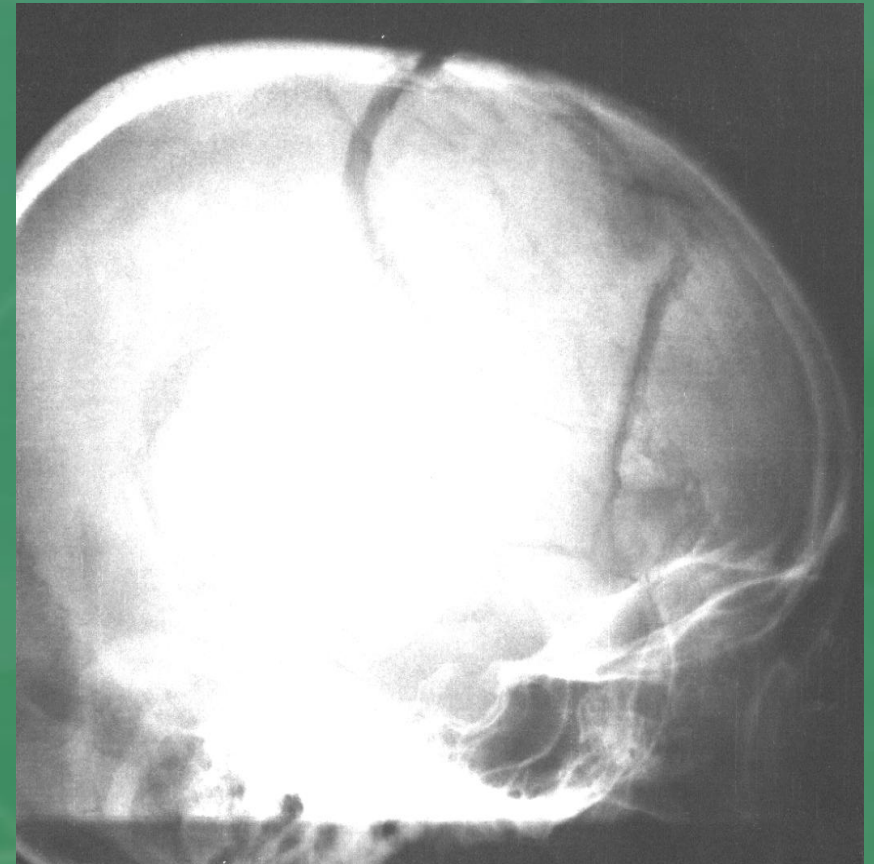
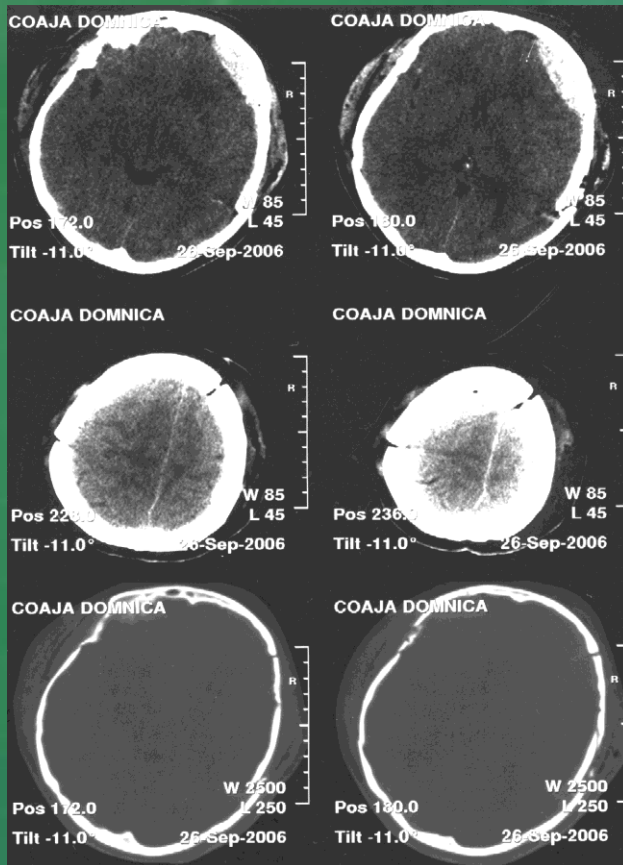




# HED PRIN DECOLARE, DUPA TUMORA DE FOSA OPERATA

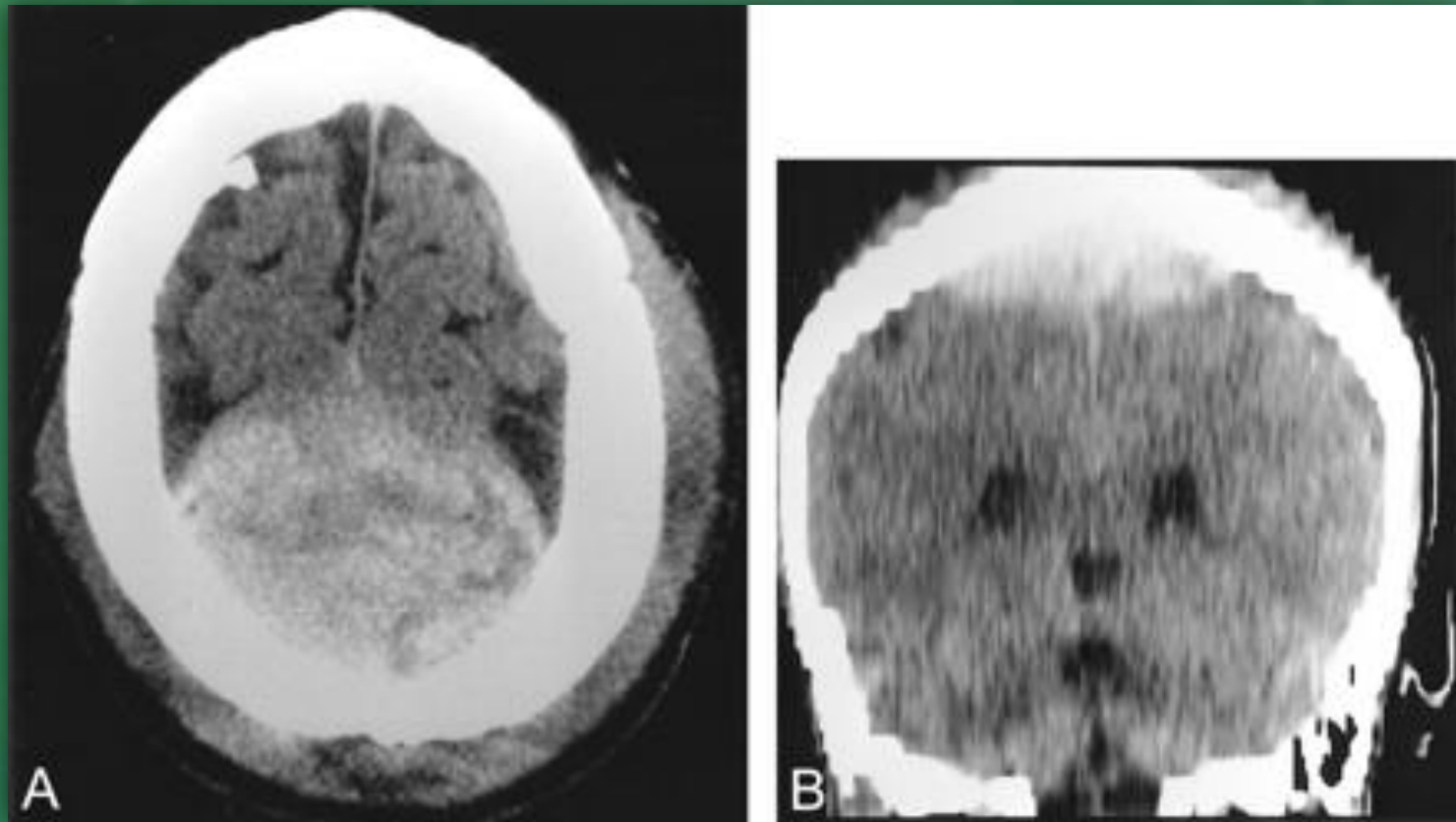


# HED FRONTAL- MULTIPLE FRACTURI CRANIENE



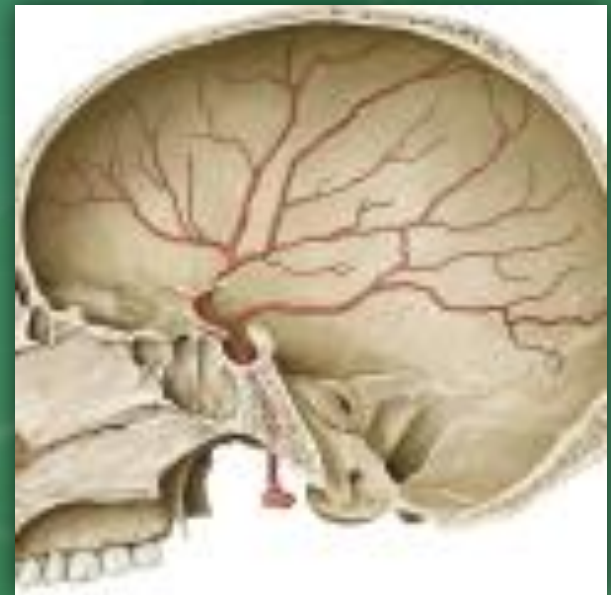


# HEMATOM EPIDURAL IN VERTEX



# ZONELE DECOLABILE GERARD-MARCHAND

- *Au niveau des faces latérales du crâne, dans la région temporo-pariétale, la dure-mère est facilement décollable déterminant la zone décollable de Gérard Marchant*





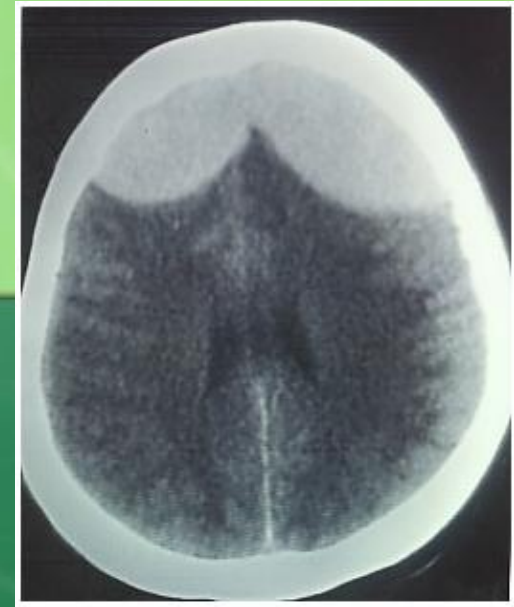
# ASPECTUL CLINIC

## ■ TREI FAZE:

- 1) *PIERDERE DE CUNOSTINTA* POSTTRAUMATICA  
IN 60% DIN CAZURI
- 2) *INTERVAL LUCID* DE ORE (SAU MINUTE IN  
CAZUL LEZIUNILOR SUPRA-ACUTE)- PREZENT  
LA 80% DIN CAZURI
- 3) *APARITIA SEMNELOR NEUROLOGICE:*
  - SOMNOLENTA
  - DEFICIT CONTROLATERAL
  - MIDRIAZA IPSILATERALA

# ALTE SEMNE CLINICE

- VARSATURI
- CRIZE EPILEPTICE
- HIPERREFLEXIE
- BABINSKI POZITIV
- CRESTEREA PRESIUNII INTRACRANIENE
- BRADICARDIE
- SCADERE RAPIDA A HEMATOCRITULUI CU 10% IN PRIMELE ORE DUPA INTERNARE
- HEMIPAREZA IPSILATERALA PRIN COMPRESIA PEDUNCULULUI CONTRALATERAL-PRIN FENOMENUL KERNOHAN AL INCIZURII TENTORIALE=SEMN FALS DE LOCALIZARE (ECHIVALENTUL RAPID AL SD. ECTORS DIN MENINGIOAMELE DE PICIOR F2)





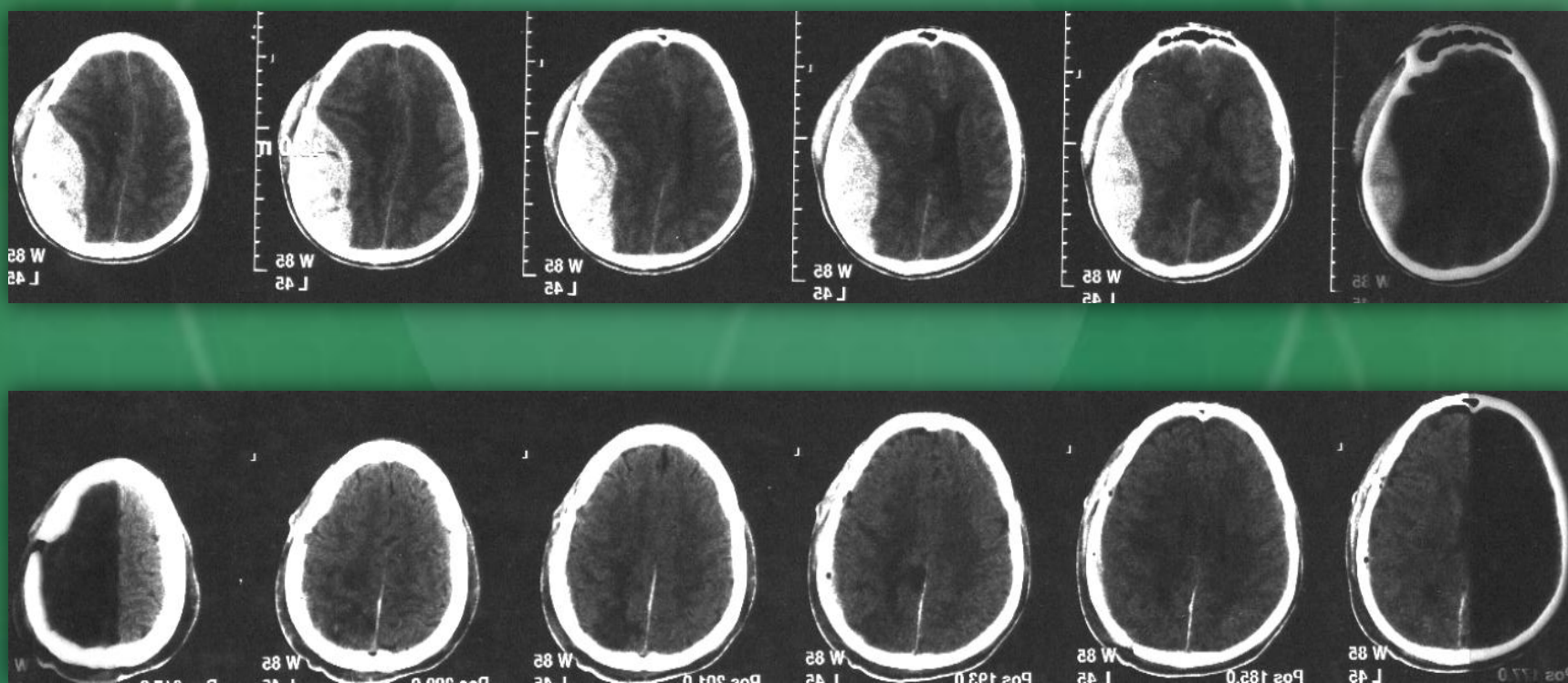
# EVOLUTIE

## NETRATAT CONDUCE LA:

- RIGIDITATE DE DECEREBRARE
  - HIPERTENSIUNE
  - INSUFICIENTA RESPIRATORIE
  - DECES
- 
- DETERIORAREA SE PRODUCE DE OBICEI IN DECURS DE CATEVA ORE
  - DETERIORAREA IN INTERVALE MAI LUNGI ESTE ASOCIATA CU SANGERARILE VENNOASE



# HED GIGANT OPERAT LA APROXIMATIV 18 ORE DE LA TRAUMATISM- EVOLUTIA: ENCEFALOPATIE GRAVA POSTTRAUMATICA





# DIAGNOSTIC DIFERENTIAL

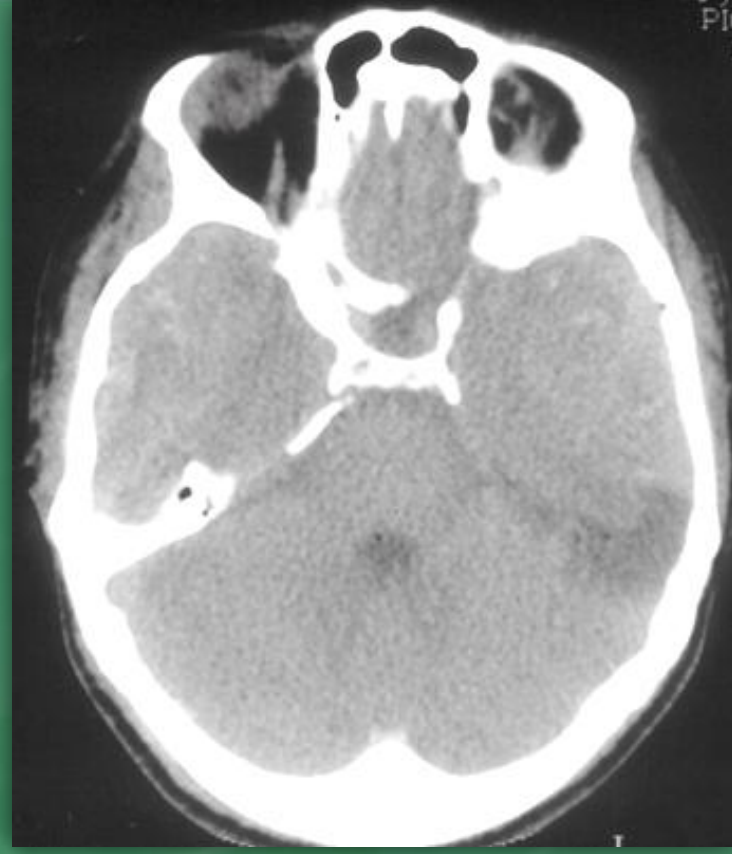
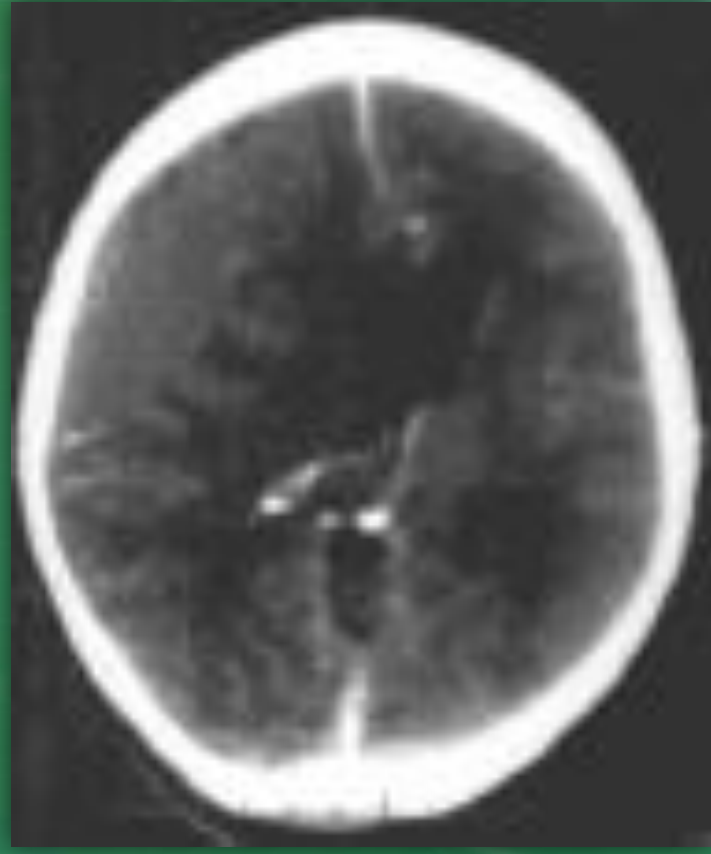
- DIFERITE **FORME DE SINCOPE VAGALE** POSTTRAUMATICE ASOCIATE CU CEFALEE (MAI ALES LA COPII), BRADICARDIE, VARSATURI SI SOMOLENTA, IN AFARA UNOR LEZIUNI INTRACEREBRALE (CT NEGATIV REPETAT)

# EVALUAREA RADIOLOGICA

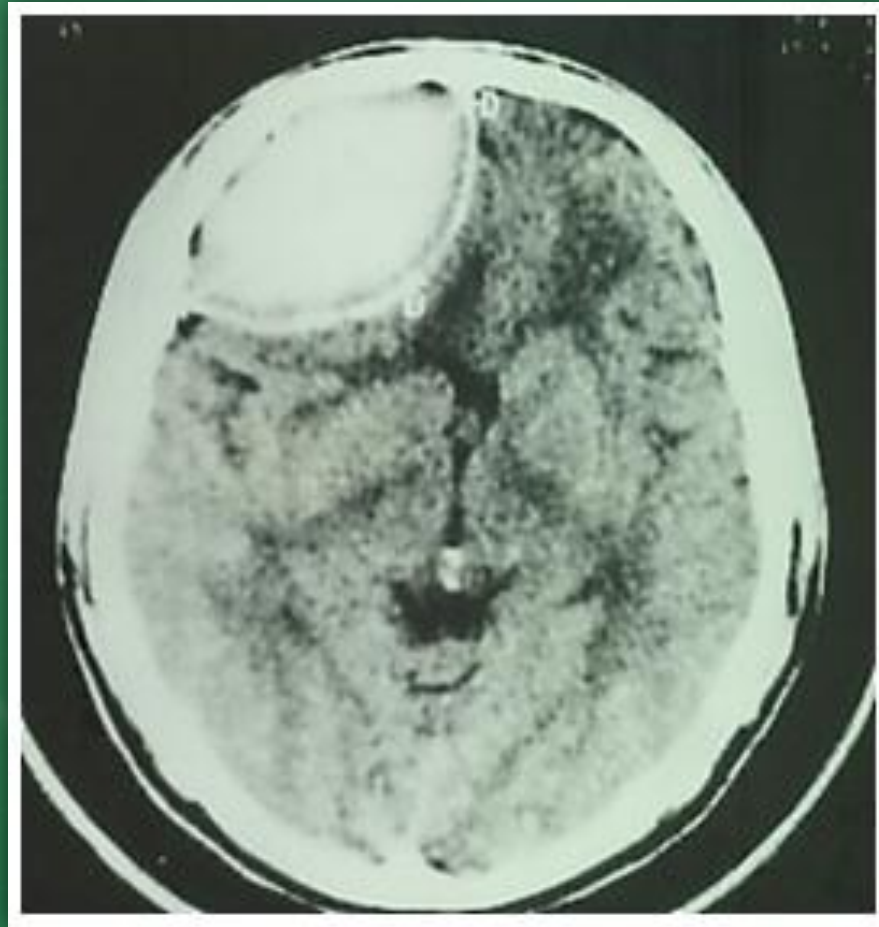
- **RADIOGRAFIA CRANIANA:** FRACTURA CRANIANA LIPSESTE IN 40% DIN CAZURI, PACIENTII AVAND DE OBICEI VARSTE SUB 30 DE ANI
- **EXAMINAREA CT:**
  - LENTILA BICONVEXA HIPERDENSE IN 80% DIN CAZURI
  - LENTILA CONVEXA LA EXTERIOR SI PLANA SPRE CREIER - 11% DIN CAZURI
  - ASPECT NEREGULAT CARE SE PLIAZA CALVARIEI PE ZONE INGUSTE, CU EFECT DE MASA, ASEMANATOR HSD, IN 5% DIN CAZURI
  - RAR POATE AVEA ASPECT IZODENS SI NECESITA ADMINISTRAREA DE CONTRAST (DURA MATER VA PRINDE CONTRASTUL!)



# HED IZODENSE



# HED CRONIC FRONTAL (CT CU CONTRAST)



# MORTALITATEA

- INTRE 20 SI 55%
- IN CONDITIILE DIAGNOSTICULUI SI TRATAMENTULUI PRECOCE IN PRIMELE ORE MORTALITATEA ESTE DE 5-12%
- MORTALITATEA ESTE CRESCUTA LA CAZURILE CARE EVOLUEAZA FARA INTERVAL LIBER
- SEMNELE PRECOCE DE DECEREBRARE, SAU STOPUL RESPIRATOR CAUZAT DE ANGAJAREA UNCALA SUNT FACTORI DE PROGNOSTIC FOARTE SEVER
- LA PACIENTII VARSTNICI CARE ASOCIAZA ARTERIOSCLEROZA, MORTALITATEA CRESTE LA 25-90%



# TRATAMENT



## ■ **TRATAMENT MEDICAL: HED MICI**

- SUB 1 CM GROSIME,
- SITUATE SUPRATENTORIAL (CELE DE FOSA POSTERIOARA SE OPEREAZA)
- FARA SEMNE NEUROLOGICE
- FARA SEMNE DE PROGRESIE A SANGERARII
- IN UNELE CAZURI HED POATE SUFERI O CRESTERE BRUSCA DE VOLUM IN ZILE 5-16 DE EVOLUTIE SI POATE NECESITA O CRANIOTOMIE DE URGENTA

## ■ **CEL MAI ADESEA HED SUNT AFECTIUNI CU INDICATIE NEUROCHIRURGICALA**

# INTERVENTIA NEUROCHIRURGICALA

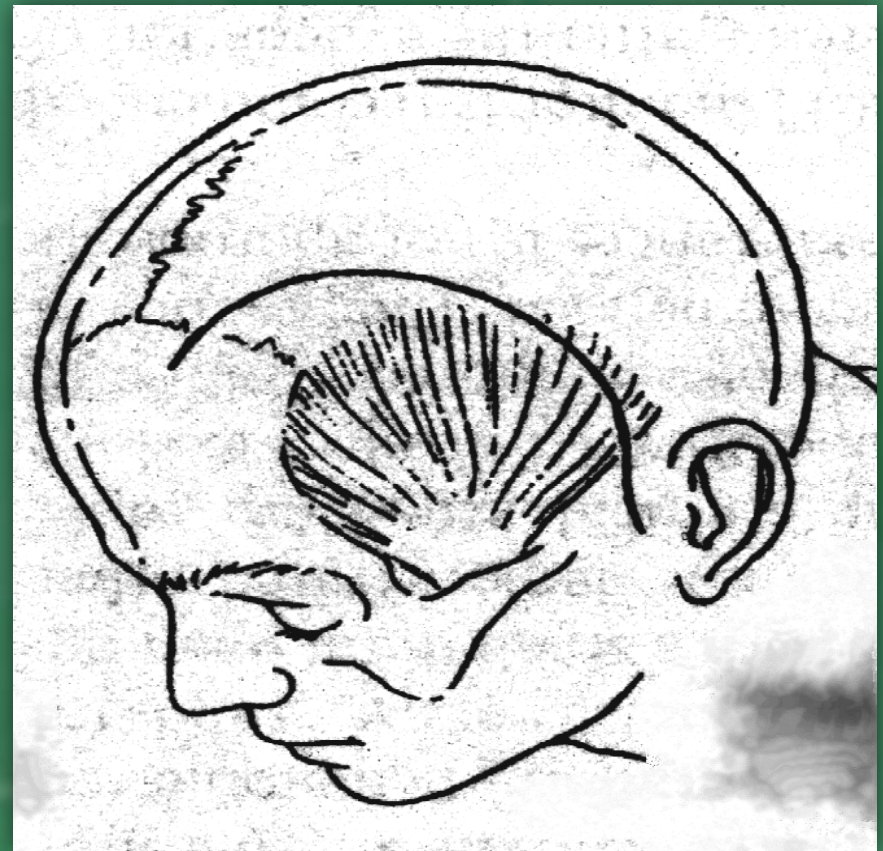
- SE EFECTUEAZA IN SALA DE OPERATIE CU EXCEPTIA PACIENTILOR CARE SUFERA SD. DE ANGAJARE LA CAMERA DE GARDA (...GAURA DE TREPAN DIN LIFT!....)
- **INDICATII:**
  - HED SIMPTOMATIC
  - HED ASIMPTOMATIC CU GROSIME PESTE 1 CM
  - HED LA COPII-PRAGUL DE TOLERANTA LA SANGERARE ESTE FOARTE SCAZUT

# OBIECTIVE

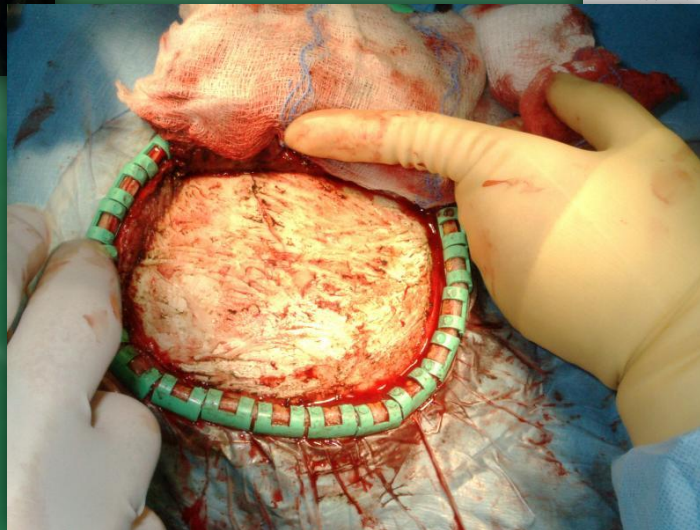
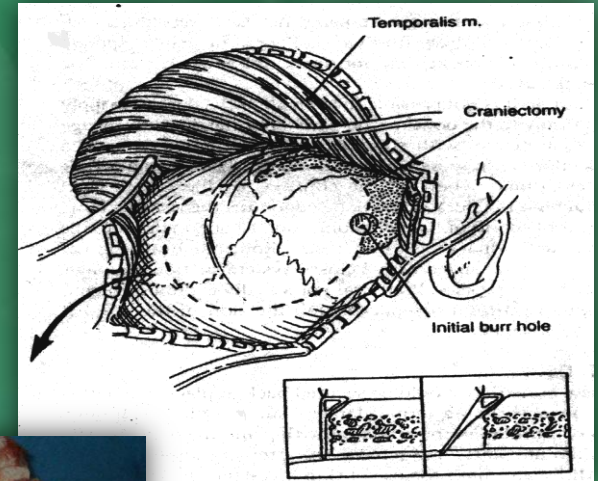
- **INDEPARTAREA CHEAGURILOR**, SCADEREA PIC, SI ELIMINAREA EFECTULUI DE MASA
- **HEMOSTAZA**: COAGULAREA SURSELOR DE SANGERARE-ARTERE, VENE, APLICAREA DE CEARA PE SURSELE INTRADIPLOICE DE SANGERARE
- **PREVENIREA REACUMULARILOR SANGUINE** PRIN SUSPENDAREA ADECVATA A DUREI MATER



# CRANIOTOMIA PENTRU HEMATOM EXTRADURAL-INCIZIA LA SCALP

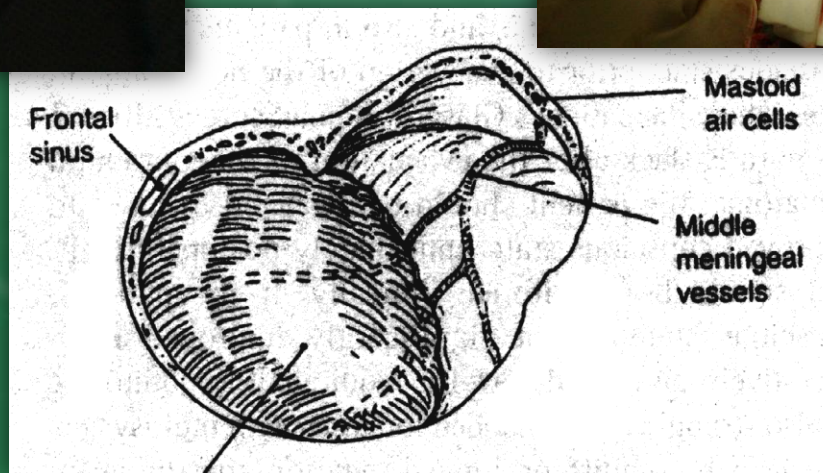
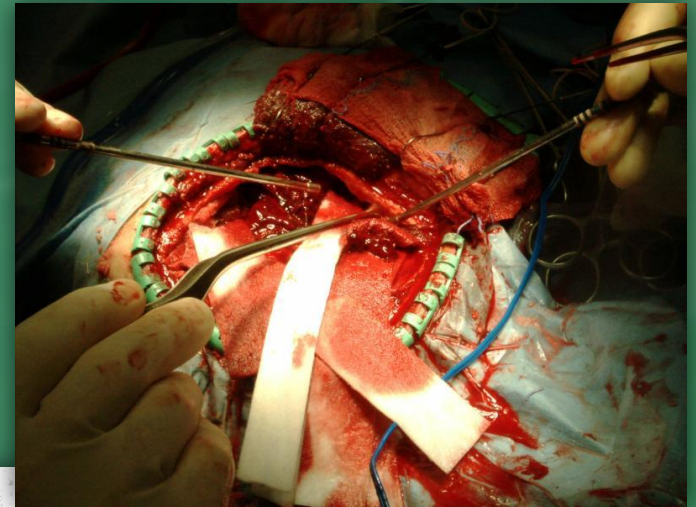


# CRANIOTOMIA PENTRU HEMATOM EXTRADURAL-VOLETUL SI DISECTIA MUSCHIULUI TEMPORAL

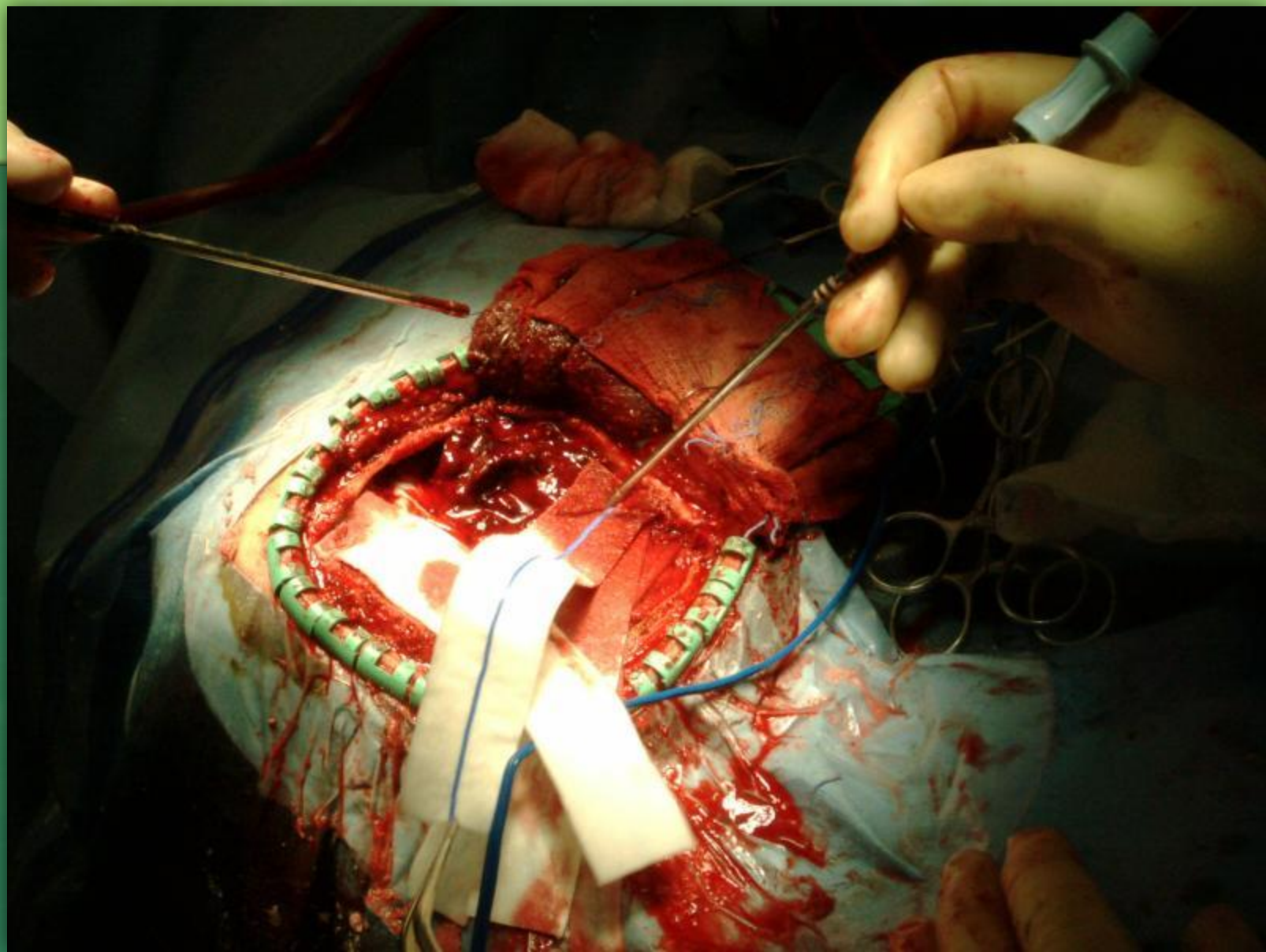


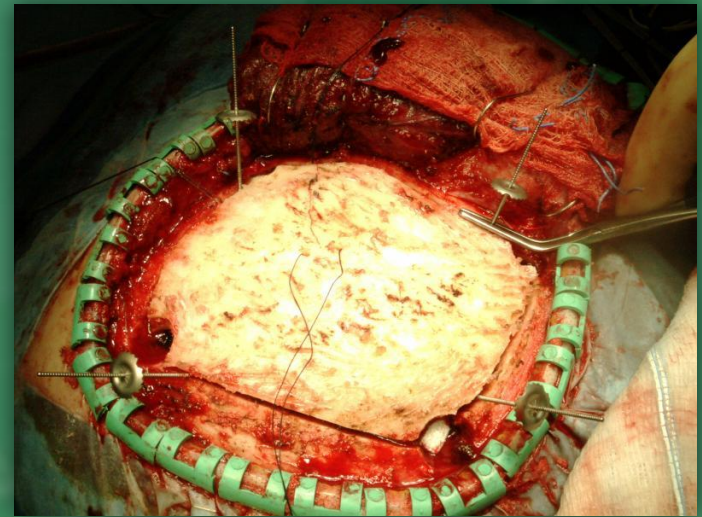
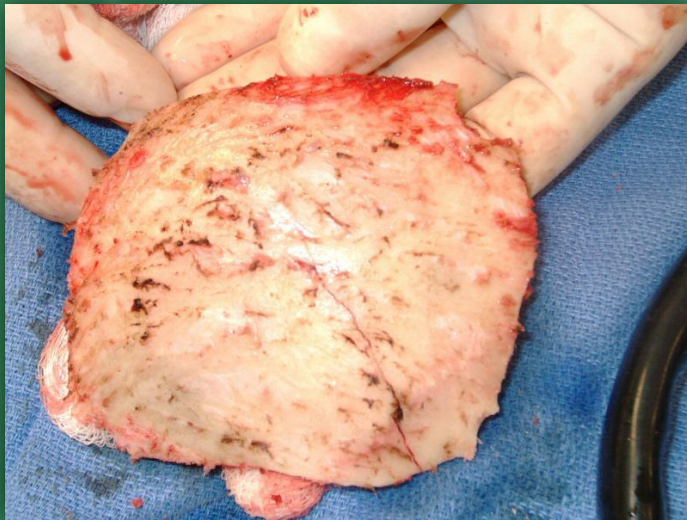
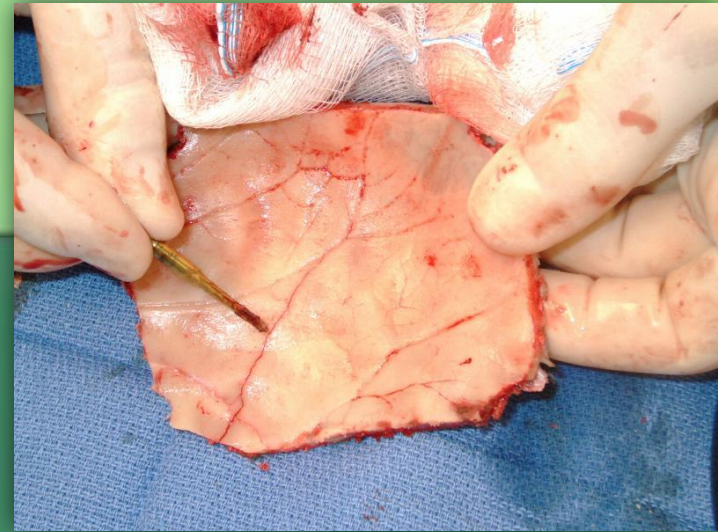
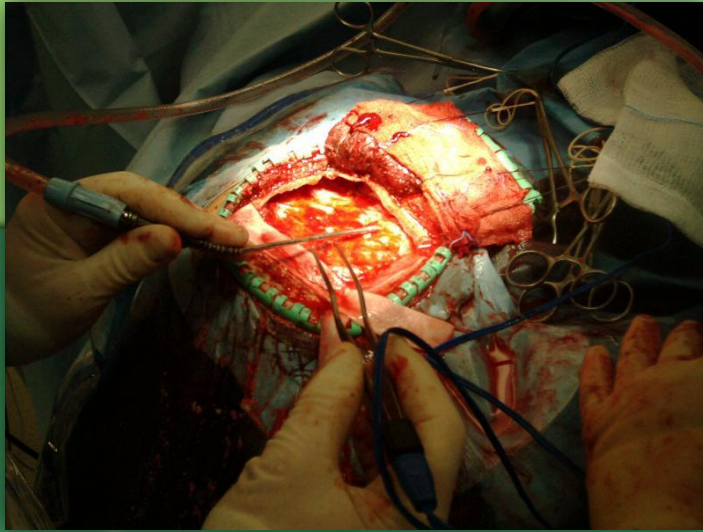


# CRANIOTOMIA PENTRU HEMATOM EXTRADURAL-EVACUAREA HEMATOMULUI

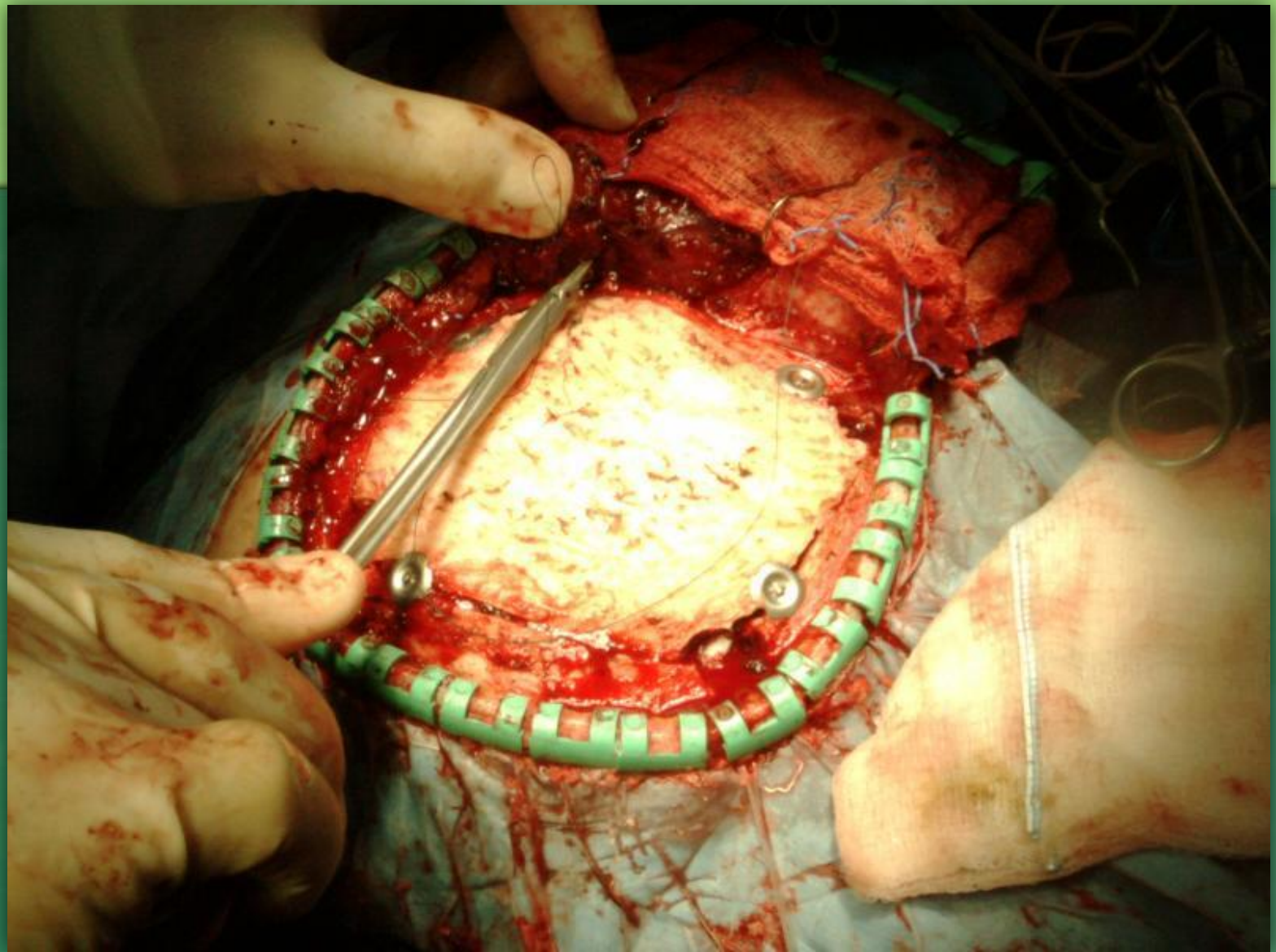












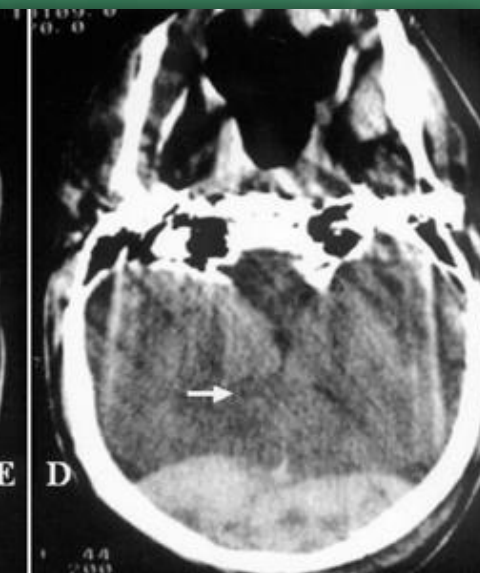
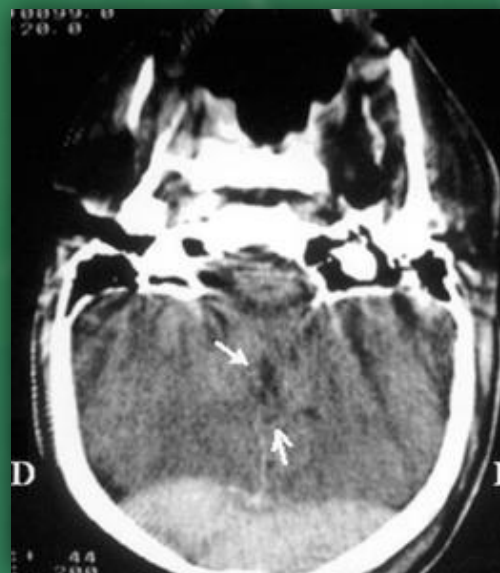
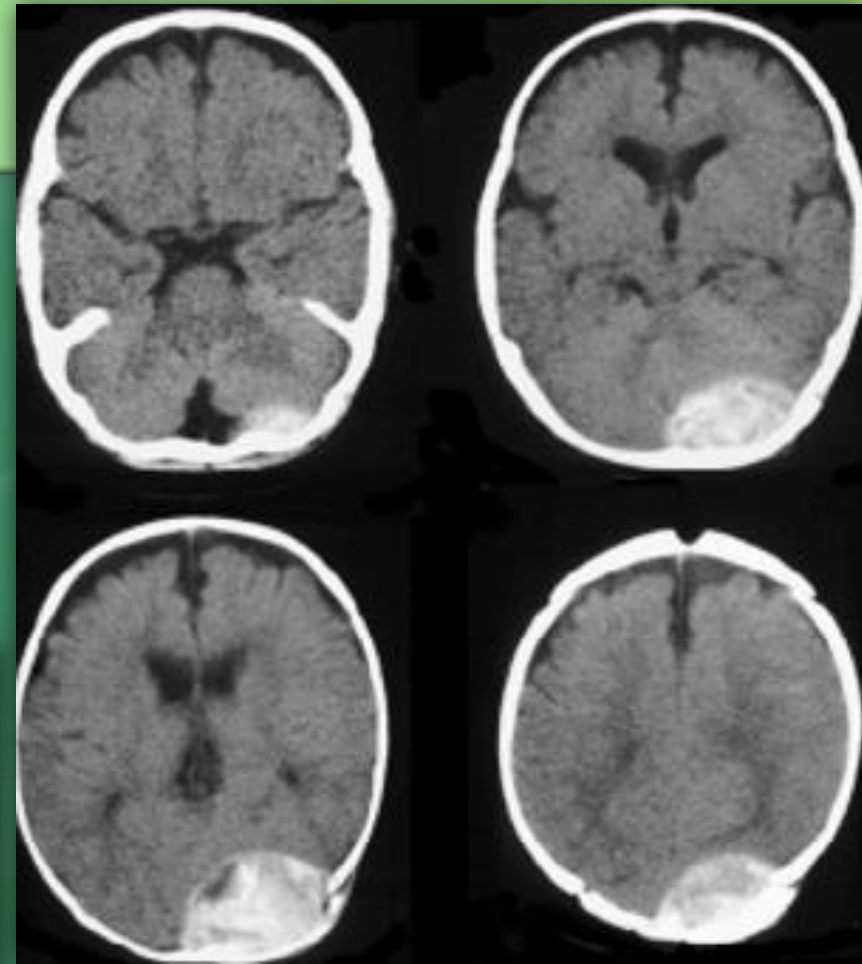


# HED TARDIVE

- 9-10% DIN HED NU SUNT PREZENTE PE EX CT LA INTERNARE DAR POT APARE LA EXAMINARILE ULTERIOARE-ABSENTA SIMPTOMELOR DUPA INTERNARE SAU STAREA NEUROLOGICA BUNA NU EXCLUD DEZVOLTAREA UNUI HED
- SE ASOCIAZA RAR CU TRAUMATISME MEDII (CGS<12)
- PREZENTA UNEI FRACTURI REPREZINTA SITUATIA CEA MAI FRECVENTA DE APARITIE A HED TARDIVE
- **RISCU TEORETIC DE APARITIE A HED TARDIVE ESTE DAT DE:**
  - SCADEREA PIC PRIN DIURETCE OSMOTICE
  - EVACUAREA UNOR LEZIUNI CONTRALATERALE (SCADE PRESIUNEA DE TAMPONADA)-HED APAR IN 24 DE ORE DUPA OPERATIE
  - CORECTAREA RAPIDA A SOCULUI
  - PREZENTA COAGULOPATIILOR

# HED DE FOSA POSTERIOARA

- REPREZINTA **5% DIN TOTALITATEA HED**
- APAR CEL **MAI FRECVENT IN PRIMLE 2 DECADE** DE VIATA
- 84% SUNT ASOCIATE UNOR FRACTURI DE SCUAMA OCCIPITALA
- NUMAI 3% DIN COPII CU FRACTURI OCCIPITALE DEZVOLTA HED
- **SURSA CEA MAI FRECVENTA DE SANGERARE ESTE REPREZENTATA DE DILACERAREA SINUSURILOR DURALE**
- **CLINIC:** SEMNELE CEREBELOASE SUNT DISCRETE SAU ABSENTE
- ***SE RECOMNDA EVACUAREA CHIRURGICALA A LEZIUNILOR SIMPTOMATICE***
- **MORTALITATEA ATINGE 26% SI CRESTE ATUNCI CAND PACIENTUL MAI ARE SI ALTE LEZIUNI INTRACRANIENE**





# CONCLUZII

- *HEMATOMUL EPIDURAL ESTE CONSIDERAT A FI O URGENTA MAXIMA NEUROCHIRURGICALA*
- *PROGNOSTICUL DEPINDE IN MARE MASURA DE:*
  - VARSTA PACIENTULUI SI AFECTIUNILE ASOCIATE
  - TIMPUL SCURS DE LA INSTALAREA COMEI PANA LA DECOMPRESIUNE CARE TREBUIE SA FIE **SUB 6 ORE**
  - PREZENTA LEZIUNILOR TRAUMATICE ASOCIATE, IN CAZUL POLITRAUMATISMELOR



**MULTUMESC  
PENTRU ATENTIE!**